Clean Copy of Claims

10/666,596

1. (Currently Amended) A method of generating an idem-random number, said method comprising the steps of:

a. Establishing an initial prime number;

b. Establishing a subsequent prime number identification condition;

c. Determining a first subsequent prime number satisfying the subsequent prime number identification condition applied to the initial prime number;

d. Identifying a mathematical relationship to be applied to said initial prime number and said subsequent prime number;

e. Applying said mathematical relationship to said initial prime number and said subsequent prime number to generate an idem-random number for use in an application which can employ random numbers .

2. (Currently Amended) A method of generating a plurality of idem-random numbers, said method comprising the steps of:

a. Establishing an initial prime number;

b. Establishing a subsequent prime number identification condition;

c. Determining a first subsequent prime number satisfying the subsequent prime number identification condition applied to the initial prime number;

d. Determining at least one further subsequent prime number satisfying the subsequent prime number identification condition applied to a previously determined subsequent prime number;

e. Identifying a mathematical relationship to be applied to a plurality of numbers selected from a set of numbers including said initial prime number and said subsequent prime numbers;

f. Applying said mathematical relationship to a first subset of numbers selected from said set of numbers to generate a first idem-random number for use in an application which can employ random numbers;

g. Applying said mathematical relationship to a second subset of numbers selected from said set of numbers to generate a subsequent idem-random number for use in an application which can employ random numbers.

3. (Original) A method of generating a plurality of idem-random numbers according to claim 2, wherein said steps d. through g. are repeated to generate a desired number of idem-random numbers.

4. (Original) A method according to claim 2, further comprising the steps of:

h. Establishing desired distribution characteristics;

i. Determining a distribution operation to be applied to said idem-random numbers to create said desired distribution; and

j. Applying said distribution operation to said idem-random numbers to generate specifically distributed idem-random numbers.

5. (Original) A method according to claim 3, further comprising the steps of:

h. Establishing desired distribution characteristics;

i. Determining a distribution operation to be applied to said idem-random numbers to create said desired distribution; and

j. Applying said distribution operation to said idem-random numbers to generate specifically distributed idem-random numbers.

6. (Currently Amended) A method of generating an idem-random number, said method comprising the steps of:

a. Specifying particular prime-like characteristics to be satisfied;

b. Establishing an initial prime-like number which satisfies said prime-like characteristics;

c. Establishing a subsequent prime-like number identification condition;

d. Determining a first subsequent prime-like number satisfying the subsequent prime-like number identification condition applied to the initial prime-like number;

e. Identifying a mathematical relationship to be applied to said initial prime-like number and said subsequent prime-like number;

f. Applying said mathematical relationship to said initial prime-like number and said subsequent prime-like number to generate an idem-random number for use in an application which can employ random numbers.

7. (Currently Amended) A method of generating a plurality of idem-random numbers, said method comprising the steps of:

a. Specifying particular prime-like characteristics to be satisfied;

b. Establishing an initial prime-like number which satisfies said prime-like characteristics;

c. Establishing a subsequent prime-like number identification condition;

d. Determining a first subsequent prime-like number satisfying the subsequent prime-like number identification condition applied to the initial prime-like number;

e. Determining at least one further subsequent prime-like number satisfying the subsequent prime-like number identification condition applied to a previously determined subsequent prime-like number;

f. Identifying a mathematical relationship to be applied to a plurality of prime-like numbers selected from a set of numbers including said initial prime-like number and said subsequent prime-like numbers;

g. Applying said mathematical relationship to a first subset of numbers selected from said set of numbers to generate a first idem-random number for use in an application which can employ random numbers;

h. Applying said mathematical relationship to a second subset of numbers selected from said set of numbers to generate a subsequent idem-random number for use in an application which can employ random numbers.

8. (Original) A method of generating a plurality of idem-random numbers according to claim 7, wherein said steps d. through g. are repeated to generate a desired number of idem-random numbers.

9. (Original) A method according to claim 7, further comprising the steps of:

h. Establishing desired distribution characteristics;

i. Determining a distribution operation to be applied to said idem-random numbers to create said desired distribution; and

k. Applying said distribution operation to said idem-random numbers to generate specifically distributed idem-random numbers.

10. (Original) A method according to claim 8, further comprising the steps of:

h. Establishing desired distribution characteristics;

i. Determining a distribution operation to be applied to said idem-random numbers to create said desired distribution; and

j. Applying said distribution operation to said idem-random numbers to generate specifically distributed idem-random numbers.

11. (Currently Amended) An apparatus for generating an idem-random number, said apparatus comprising:

a. Initial prime number establishment means for establishing an initial prime number;

b. Subsequent prime number identification condition means for establishing a subsequent prime number identification condition;

c. Determination means for determining a first subsequent prime number satisfying the subsequent prime number identification condition applied to the initial prime number;

d. Mathematical relationship identification means for identifying a mathematical relationship to be applied to said initial prime number and said first subsequent prime number;

e. Calculation means for applying said mathematical relationship to said initial prime number and said first subsequent prime number to generate an idem-random number for use in an application which can employ random numbers.

12. (Currently Amended) An apparatus for generating a plurality of idem-random numbers, said apparatus comprising:

a. Initial prime number establishment means for establishing an initial prime number;

b. Subsequent prime number identification condition means for establishing a subsequent prime number identification condition;

c. First determination means for determining a first subsequent prime number satisfying the subsequent prime number identification condition applied to the initial prime number;

d. Second determination means for determining at least one further subsequent prime number satisfying the subsequent prime number identification condition applied to a previously determined subsequent prime number;

e. Mathematical relationship identification means for identifying a mathematical relationship to be applied to a plurality of numbers selected from a set of numbers including said initial prime number and said subsequent prime numbers;

f. First calculation means for applying said mathematical relationship to a first subset of numbers selected from said set of numbers to generate a first idem-random number for use in an application which can employ random numbers;

g. Second calculation means for applying said mathematical relationship to a second subset of numbers selected from said set of numbers to generate a subsequent idem-random number for use in an application which can employ random numbers.